LAND APPLICATION OF BIOSOLIDS
WESLEY A. WALKER

KW 40 (FIELDS 1-5,8,12)
KING WILLIAM COUNTY, VIRGINIA
April 2020

1681 Tappahannock Blvd.
Tappahannock, VA 22560
www.synagro.com

SYNAGRO

APRIL 16, 2020

Mr. Neil Zahradka
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

Dear Mr. Zahradka,

Transmitted herein for your consideration is land application site for Wesley A. Walker (designated as KW 40, fields 1-5,8,12), located in King William County, Virginia. This submission contains strictly site specific information. Please refer to the operations and maintenance manual submitted under separate cover for all non-site specific information.

Do not hesitate to contact me at (804) 443-2170 should you have any questions or require additional information.

Sincerely,

Wayne T. Webb Jr.

Technical Services Manager

SYNAGRO

FIELD SUMMARY SHEET

Wesley A. Walker **KW 40**

SYNAGRO FIELD #	GROSS ACRES	NET ACRES	FSA TRACT #	FIELD TYPE	OWNER
40-01	42.0	42.0		Agriculture	Wesley Walker III
40-02	7.3	7.3		Agriculture	Wesley A. Walker
40-03	21.4	21.4		Agriculture	Wesley A. Walker
40-04	15.8	15.8		Agriculture	Wesley A. Walker
40-05	76.8	76.8		Agriculture	Wesley A. Walker Sandra F. Walker
40-08	48.9	48.9		Agriculture	Henry L. Previs Gregory J. Previs Et Als
40-12	74.8	74.8		Agriculture	Wesley A. Walker Sandra F. Walker
Total	287.0	287.0			05/13/2020

SYNAGRO

A Residuals Management Company

VIRGINIA REQUEST AND CONSENT FOR BIOSOLIDS

FARM OPERATOR: Wesley Walker PHONE: ( ) 804-512-9155

ADDRESS: 1215 Green Level Rd. King William, VA 23086

FARM LOCATION: _____

_____

FSA TRACT #: _____

TOTAL ACRES: _____ COUNTY: King William

CROPS: Corn, Soybean,

1. I agree to be responsible for adhering to the following conditions, where applicable:
   a. The soil pH will be adjusted ≥6.0 when biosolids are applied. (This may be accomplished through the application of lime-treated biosolids).
   b. Do not graze animals on the land for 30 days after the application of biosolids. In addition, animals intended for dairy production should not be allowed to graze on the land or be fed chopped foliage for 60 days after the application of biosolids. Meat-producing livestock should not be fed chopped foliage for 30 days after the application of biosolids.
   c. Food crops for direct human consumption with harvested parts below the surface of the land shall not be harvested for 14 months after the application of biosolids.
   d. Food crops for direct human consumption with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface ≥ 4 months prior to incorporation into the soil or 38 months when the biosolids remain on the land surface < 4 months prior to incorporation.
   e. Food crops, feed crops and fiber crops shall not be harvested for 30 days after application of biosolids.
   f. Public access to land with a low potential for public exposure (land the public uses infrequently including but not limited to agricultural land and forests) shall be restricted for 30 days after application of biosolids. Public access to land with a high potential for public exposure (land the public uses frequently including but not limited to a public contact site such as parks, playgrounds and golf courses) shall be restricted for 1 year. No biosolids-amended soil shall be excavated or removed from the site for 30 days following the biosolids application unless adequate provisions are made to prevent public exposure to soils, dusts or aerosols.
   g. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.
   h. Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs fro nutrients are not exceeded as identified on the nutrient balance sheet or the nutrient management plan approved by the Virginia Department of Conservation and Recreation to be supplied to the farm operator by Synagro at the time of application of biosolids to a specific permitted site.
   i. Tobacco, because it has been shown to accumulate cadmium, should not be grown for three years following the application of biosolids-borne cadmium equal to or exceeding 0.45 lbs/acre.
2. I understand that this transaction is not contemplated by the parties to be a sale of goods, and that Synagro is willing to provide to me without charge the service of land applying biosolids which have been approved by the appropriate regulatory agencies for land application.
3. I understand that successful crop production depends on many variables, such as weather, soil conditions and specific farming practices and that while Synagro has experience with land application of biosolids, the responsibility for properly accommodating agricultural practices to biosolids utilization are solely mine. I have also read and understand the "Important Information About Using Biosolids as a Fertilizer" which is on the reverse side and incorporated by reference in this Request and Consent.

_____ 7/21/2020

OPERATOR'S SIGNATURE DATE

Synagro * 10647 Tidewater Trail * Champlain, VA 22438 * 804.443.2170

SYNR&CVA * 04/07 WHITE: Regional Office CANARY: Landowner

IMPORTANT INFORMATION ABOUT USING BIOSOLIDS AS A FERTILIZER

Biosolids Generation

Biosolids are the accumulated, treated solids separated from water during the treatment of wastewater by public and private wastewater treatment plants (Generators). The Generator is responsible for supplying biosolids that are suitable for land application under state and federal regulations.

Benefits of Biosolids

Biosolids provide nitrogen in a form that can be taken up by plants during their growth cycle. Biosolids also add phosphorus to the soil. If lime is added to biosolids, the biosolids will have the added benefit of a liming agent. Biosolids contain primary, secondary and micronutrients that can be used by plants. Biosolids are primarily an organic material; when added to soil, they improve water and nutrient retention, reduce erosion potential and improve soil structure.

The Permitting Process

Once the farm operator requests biosolids, a Synagro representative initially evaluates the farm for truck access and field conditions. If the farm is found to be suitable and the Request for Biosolids and the Consent for Biosolids forms are signed, Synagro will collect soil samples and have them analyzed by an independent laboratory.

Synagro will then apply for any federal, state or local permits required for biosolids application. The permits will specifically identify the fields to which biosolids will be applied and will be issued to Synagro or the Generator.

After the permits are obtained (a process that may take several months or more) Synagro will apply biosolids, as they become available, to the fields. Availability of biosolids may vary because of weather conditions, contractual arrangements with biosolids generators and other factors. Although the company cannot guarantee biosolids application because of factors beyond its control, Synagro will use its best efforts to apply biosolids to the permitted fields.

The conditions outlined in the permit will apply to any and all biosolids applications made by Synagro. Synagro will not e responsible for biosolids application made by any other entity.

Periodic visits to the land application site(s) by federal, state and local regulatory staff and Synagro representatives may occur for the purpose of permitting the site, inspecting the site, applying biosolids, obtaining samples at the site and testing. Proper identification will be provided upon request.

Agronomic Considerations

Tractor-trailer units are used to deliver biosolids to the fields approved for biosolids applications. Soil compaction may occur on the travel areas used by the trucks and in areas where biosolids are unloaded for transfer to the applicator vehicle.

Since some biosolids contain lime, it is important to recognize any increase in soil pH where biosolids have been applied and exercise care in using certain herbicides. If considering the use of a sulfonylurea herbicide, particular attention should be paid to any label restrictions. High soil pH and dry weather may slow decomposition of these chemicals, resulting in carryover. For soils with low manganese levels, increased soil pH from lime addition (alone or in lime treated biosolids) may reduce manganese availability and thereby potentially reduce crop yields.

In planning a herbicide program, it should be noted that seeds may sometimes survive the biosolids treatment process -- for example, tomato seeds. Also, the organic matter additions from biosolids application (organic matter tends to tie up certain herbicides) may require increased herbicide application rates. Consult your extension agent or chemical representative for a specific recommendation.

Biosolids contain salts. Biosolids applications alone rarely cause salt problems. However, if combined with other significant salt-increasing factors, such as drought, excessive soil compaction, saline irrigation water and salt-contain fertilizers, salts may reach levels that could negatively affect germination and growth of some crops.

While odors from biosolids applications are not usually significant, and typically less than that from livestock manure, it is possible that an odor from the decomposition of organic matter may be noticed. It this occurs, it generally disappears in a short time.

Since biosolids provide nitrogen that will be released slowly throughout the growing season with diminishing carry-over in subsequent years, it is important to reduce the use of nitrogen and other fertilizers to appropriate levels.

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 12/12/16 between Wesley Walker III referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:
The Landowner is the owner of record of the real property located in King William, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
37-65			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:
☑ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids	Water treatment residuals	Food processing waste	Other industrial sludges
X Yes ☐ No	X Yes ☐ No	X Yes ☐ No	X Yes ☐ No

Wesley Walker III — 1215 Greenlevel Rd. King William, VA. 23086
Landowner – Printed Name, Title | Signature | Mailing Address

Permittee:
Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☑ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Wayne T. Webb, Sr. — Wayne T. Webb, Sr. — 1081 Tappahannock Blvd. Tappahannock, VA 22560
Permittee – Authorized Representative Printed Name | Signature | Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro County or City: King William

Landowner: Wesley Walker III

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.

2. Public Access
   a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
   b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
   c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.

3. Crop Restrictions:
   a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
   b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
   c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
   d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
   e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).

4. Livestock Access Restrictions:
   Following biosolids application to pasture or hayland sites:
   a. Meat producing livestock shall not be grazed for 30 days,
   b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
   c. Other animals shall be restricted from grazing for 30 days;

5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;

6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Landowner's Signature 12-12-16 Date

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 12/17/16 between Henry L. Previs & Gregory J. Previs ET-ALS referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:
The Landowner is the owner of record of the real property located in King William, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
53-66			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:
☐ The Landowner is the sole owner of the properties identified herein.
☑ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids	Water treatment residuals	Food processing waste	Other industrial sludges
X Yes ☐ No	X Yes ☐ No	X Yes ☐ No	X Yes ☐ No

Henry L. Previs — X Henry L. Previs — 11 Horse Landing, King William VA 23086
Gregory J. Previs ET-ALS — X Gregory J. Previs — 4474 Cypress Creek Dr. Bruce Geo. VA.
Landowner – Printed Name, Title — Signature — Mailing Address
David Previs — 3 Horse Landing Ct. King William Va 23086

Permittee:
Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☑ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Wayne T. Wells, Jr. — Wayne T. Wells — 1681 Tappahannock Blvd, Tappahannock, VA 22560
Permittee – Authorized Representative Printed Name — Signature — Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro County or City: King William

Landowner: Henry L. Provis
Gregory J. Provis ET-ALS

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.

2. Public Access
   a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
   b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
   c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.

3. Crop Restrictions:
   a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
   b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
   c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
   d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
   e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).

4. Livestock Access Restrictions:
   Following biosolids application to pasture or hayland sites:
   a. Meat producing livestock shall not be grazed for 30 days,
   b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
   c. Other animals shall be restricted from grazing for 30 days;

5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;

6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Dec 17, 2012

Gregory J. Provis Dec 17, 2012

Landowner's Signature Date

Henry L. Provis Dec 17, 2012

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 12/14/16 between Wesley A. Walker Sandra F. Walker referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:
The Landowner is the owner of record of the real property located in King William, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
45-8B			
45-7			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:
☐ The Landowner is the sole owner of the properties identified herein.
☑ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids	Water treatment residuals	Food processing waste	Other industrial sludges
X Yes ☐ No	X Yes ☐ No	X Yes ☐ No	X Yes ☐ No

Wesley A. Walker — x [signature] —
Sandra F. Walker — x Sandra F. Walker — x 1215 Green Level Rd. King William VA. 23086
Landowner – Printed Name, Title — Signature — Mailing Address

Permittee:
Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☑ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Wayne T. Webb Jr. — Wayne T. Webb — 1081 Tappahannock Blvd Tappahannock, VA 22560
Permittee – Authorized Representative Printed Name — Signature — Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro County or City: King William

Landowner: Wesley A. Walker
Sandra F. Walker

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

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2. Public Access
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   c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.

3. Crop Restrictions:
   a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
   b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
   c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
   d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
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4. Livestock Access Restrictions:
   Following biosolids application to pasture or hayland sites:
   a. Meat producing livestock shall not be grazed for 30 days,
   b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
   c. Other animals shall be restricted from grazing for 30 days;

5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;

6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

X [signature] [signature]

X Sandra F. Walker 12-14-16

Landowner's Signature Date

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 12/13/16 between Wesley A. Walker referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:
The Landowner is the owner of record of the real property located in King William, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
45-7B			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:
☑ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids	Water treatment residuals	Food processing waste	Other industrial sludges
X Yes ☐ No	X Yes ☐ No	X Yes ☐ No	X Yes ☐ No

Wesley A. Walker — 1215 Green Level Rd. King William VA. 23086

Landowner – Printed Name, Title | Signature | Mailing Address

Permittee:
Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☑ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Wayne T. Webb, Jr. — Wayne T. Webb — 1081 Tappahannock Blvd Tappahannock, VA 22560

Permittee – Authorized Representative Printed Name | Signature | Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro County or City: King William

Landowner: Wesley A. Walker

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.

2. Public Access
   a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
   b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
   c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.

3. Crop Restrictions:
   a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
   b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
   c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
   d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
   e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).

4. Livestock Access Restrictions:
   Following biosolids application to pasture or hayland sites:
   a. Meat producing livestock shall not be grazed for 30 days,
   b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
   c. Other animals shall be restricted from grazing for 30 days;

5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;

6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Landowner's Signature 12-13-16 Date

TAX ID LANDOWNER IDENTIFICATION SHEET

Landowner	Field Number	Tax ID
Wesley Walker III	40-01	37-65
Wesley A. Walker	40-02	45-7B
Wesley A. Walker	40-03	45-7B
Wesley A. Walker	40-04	45-7B
Wesley A. Walker Sandra F. Walker	40-05	45-8B
Henry L. Previs Gregory J. Previs Et Als	40-08	53-66
Wesley A. Walker Sandra F. Walker	40-12	45-7

Field Number	Latitude (North)	Longitude (West)
40-01	37.671°	-77.009°
40-02	37.662°	-77.021°
40-03	37.661°	-77.022°
40-04	37.657°	-77.022°
40-05	37.661°	-77.027°
40-08	37.611°	-76.977°
40-12	37.660°	-77.016°

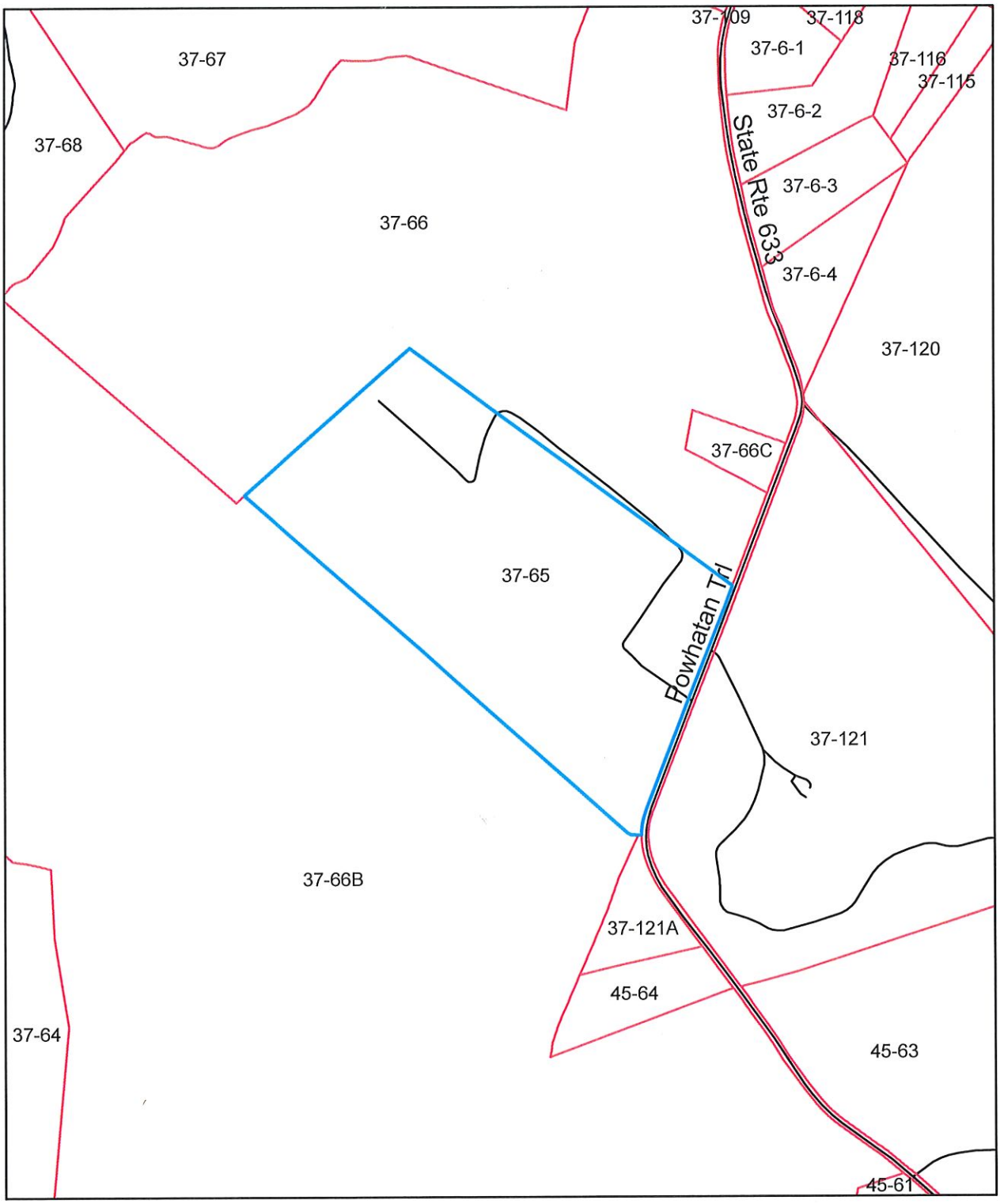
* Latitude/longitude determined by Arc GIS program

Haul Route:

The Location maps in conjunction with the above latitude and longitude coordinates are a route planning tool meant to be a guide to indicate suggested haul routes for various preferences: to include but not limited to all federal, state, and local granted STAA access routes.

SYNAGRO

Wesley A. Walker
KW 40
Field 1



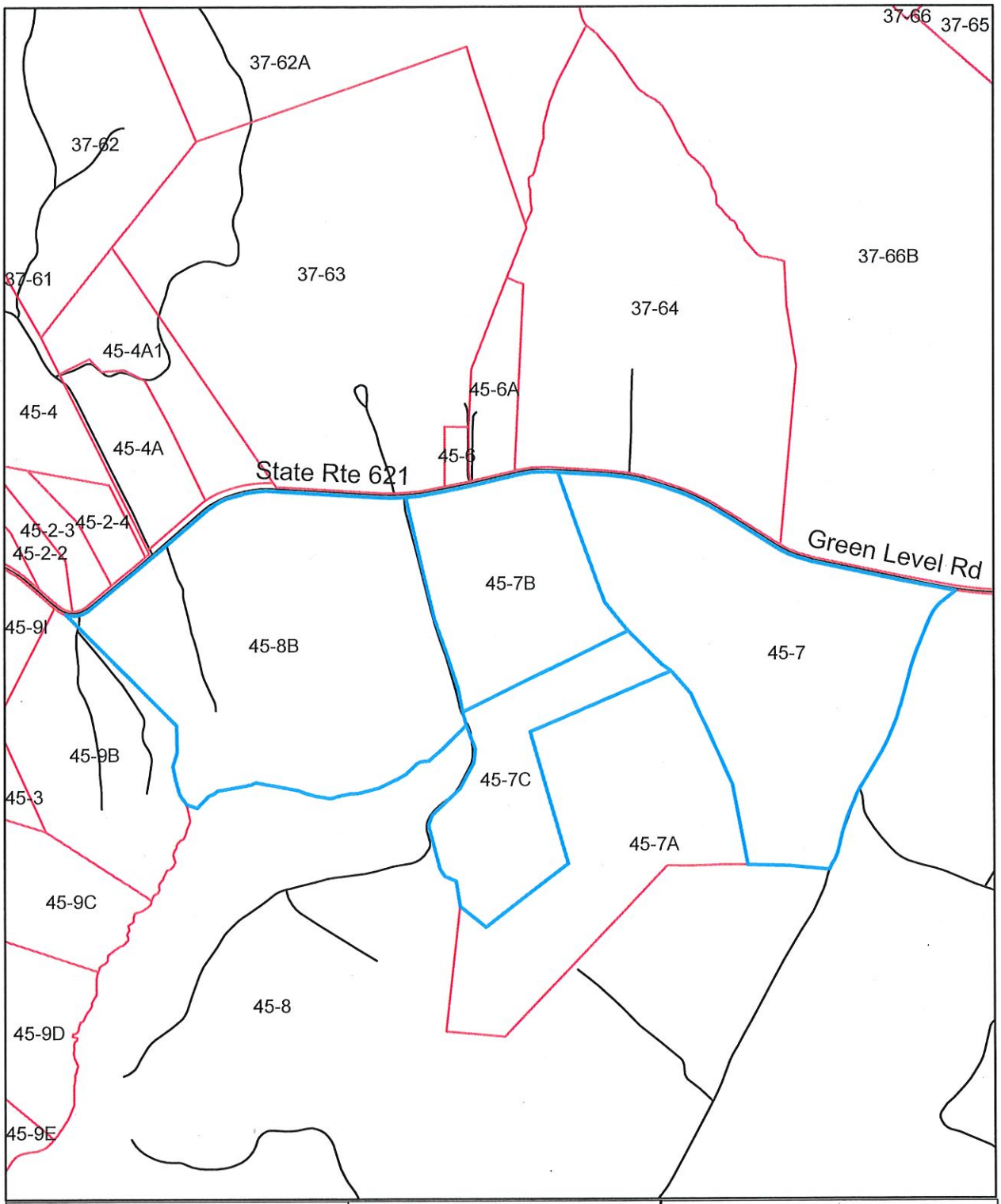
1 inch = 660 feet

TAX MAP

1:7,920

SYNAGRO

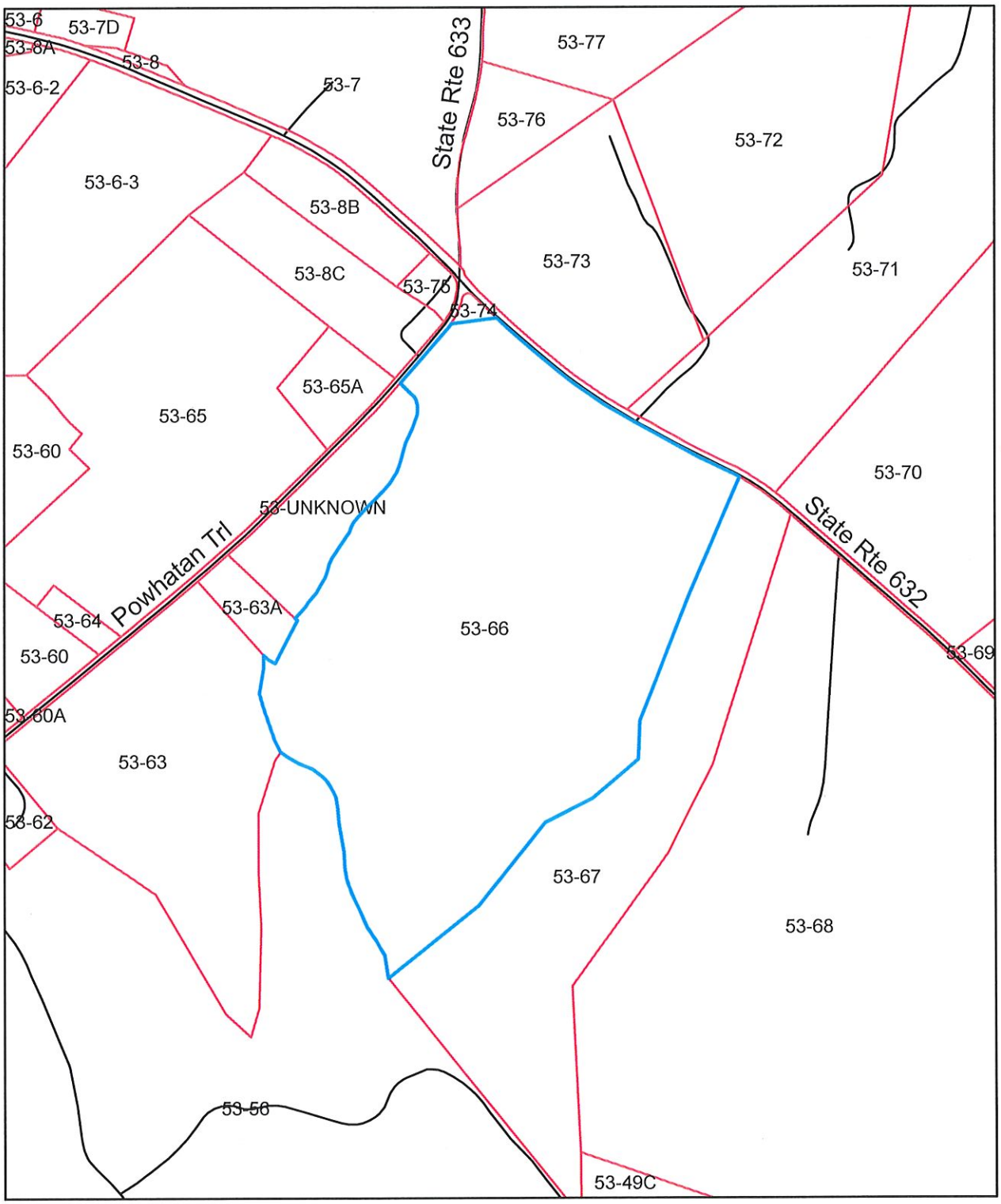
Wesley A. Walker
KW 40
Fields 2-5,12



1 inch = 1,000 feet	TAX MAP	1:12,000

SYNAGRO

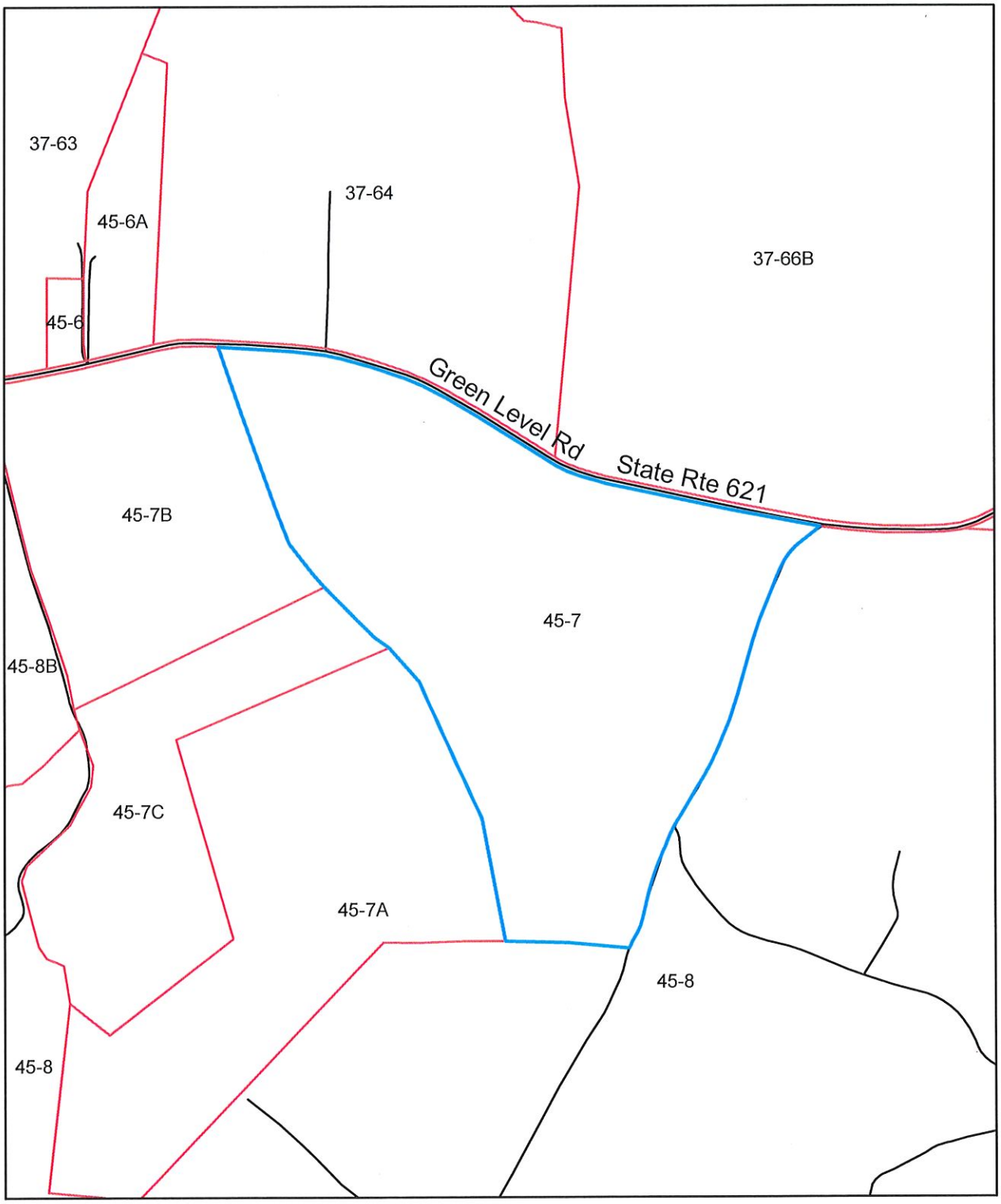
Wesley A. Walker
KW 40
Field 8



1 inch = 660 feet TAX MAP 1:7,920

SYNAGRO

Wesley A. Walker
KW 40
Field 12



1 inch = 660 feet TAX MAP 1:7,920

Farm Summary Report

Plan: **New Plan** **Fall, 2020 - Winter, 2030**

Farm Name: **New Farm**
Location: King William
Specialist: Hunter Davis
N-based Acres: 347.8
P-based Acres: 0.0

Tract Name: **KW 40**
FSA Number: 0
Location: King William

Field Name: **1**
Total Acres: 42.00 Usable Acres: 42.00
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: A Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
11	9A	Daleville
89	26A	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: **2**
Total Acres: 7.30 Usable Acres: 7.30
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: A Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
22	9A	Daleville
41	26A	Slagle
37	26B	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: 3
Total Acres: 21.40 Usable Acres: 21.40
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
27	9A	Daleville
30	26A	Slagle
44	26B	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: **4**
Total Acres: 15.80 Usable Acres: 15.80
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
4	9A	Daleville
59	10B	Emporia
13	22F	Nevarc Remlik
24	26B	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: 5

Total Acres:	76.80	Usable Acres:	76.80
FSA Number:	0		
Tract:	KW 40		
Location:		King William	
Slope Class:	C	Hydrologic Group:	C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
16	9A	Daleville
5	10A	Emporia
11	10B	Emporia
16	22F	Nevarc Remlik
48	26A	Slagle
5	26B	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: **6**
Total Acres: 50.40 Usable Acres: 50.40
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
9	9A	Daleville
1	10A	Emporia
21	10B	Emporia
41	26A	Slagle
29	26B	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: **7**
Total Acres: 7.70 Usable Acres: 7.70
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: A Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
14	9A	Daleville
23	10A	Emporia
64	26A	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: 8
Total Acres: 48.90 Usable Acres: 48.90
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
4	9A	Daleville
64	10B	Emporia
4	11B	Eulonia
28	26B	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: **10**
Total Acres: 2.70 Usable Acres: 2.70
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: D Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
34	22F	Nevarc Remlik
66	27A	STATE1

Field Warnings:
Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with perent slope in excess of 15%

Crop Rotation:

PLANTED	YIELD	CROP NAME

Field Name: 12
Total Acres: 74.80 Usable Acres: 74.80
FSA Number: 0
Tract: KW 40
Location: King William
Slope Class: A Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
70	9A	Daleville
25	26A	Slagle
5	26B	Slagle

Field Warnings:

Crop Rotation:

PLANTED	YIELD	CROP NAME

ENVIRONMENTALLY SENSITIVE AREAS

Field	Reason for Sensitive Area
40-01	High Water Table (Map Unit 9A - 9.8%)
40-02	High Water Table (Map Unit 9A - 21.6%)
40-03	High Water Table (Map Unit 9A - 27.7%)
40-04	High Water Table (Map Unit 9A - 0.7%)
40-05	High Water Table (Map Unit 9A - 16.5%)
40-08	High Water Table (Map Unit 9A - 3.6%)
40-12	High Water Potential (Map Unit 9A - 69.5%)

King William County Soils that are Environmentally Sensitive

Soil Map Unit	Series Name	Time of year		Environmental
		High Water	Flooded	
3A	Bibb/Kinston	Nov-June	Nov-June	Drainage
4A	Bohicket	Nov-June	Nov-June	
5A	Bojac	Jan-Dec		Leaching
6A, 6B	Bojac			Leaching
7A	Catpoint			Leaching
8A	Conetoe			Leaching
9A	Daleville	Nov-May		
14A	Kenansville			Leaching
15A	Lanexa	Jan-Dec	Jan-Dec	Drainage
16A	Mattan	Jan-Dec	Jan-Dec	Drainage
18A	Myatt	Nov-April		
20A	Osier	Nov-March		Drainage
22D, 22F	Remilk/Nevarc			Leaching
23A	Riverview		Dec-March	
24A	Roanoke	Nov-May		
29B, 29D, 29F	Tarboro			Leaching
30A	Tomotley	Nov-April		
32A	Wehadkee	Nov-May	Nov-May	

Map Legend

House/Dwelling with a well
- 200' buffer-dwelling (with conditions for reduction);
- 100' buffer-well

Rock Outcrop
- 25' buffer

Limestone Outcrop / Closed Sinkholes
- 50' buffer

Well
- 100' buffer

Lake/Pond
- 35' w/vegetative buffer; 100' without vegetative buffer

Slope which exceeds 15%

"PAS" - Publicly Accessible Site
- 200' buffer

Intermittent Stream
- 35' w/vegetative buffer; 100' without vegetative buffer

Stream/River
- 35' w/vegetative buffer; 100' without vegetative buffer

Agricultural/Drainage Ditch
- 10' buffer

Field Boundary

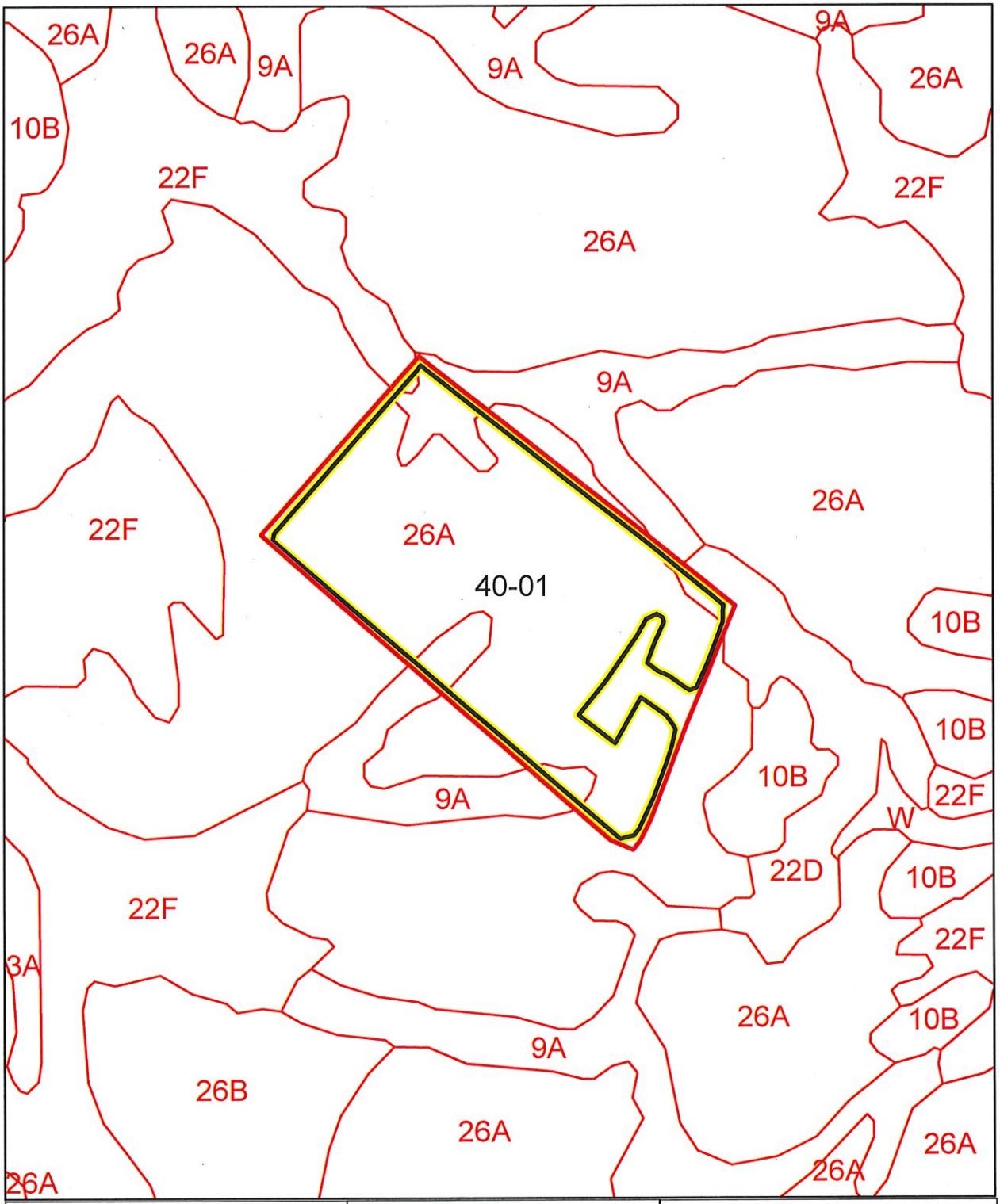
Property Line
- 100' buffer unless waiver issued

SYNAGRO

Updated Feb. 2015

SYNAGRO

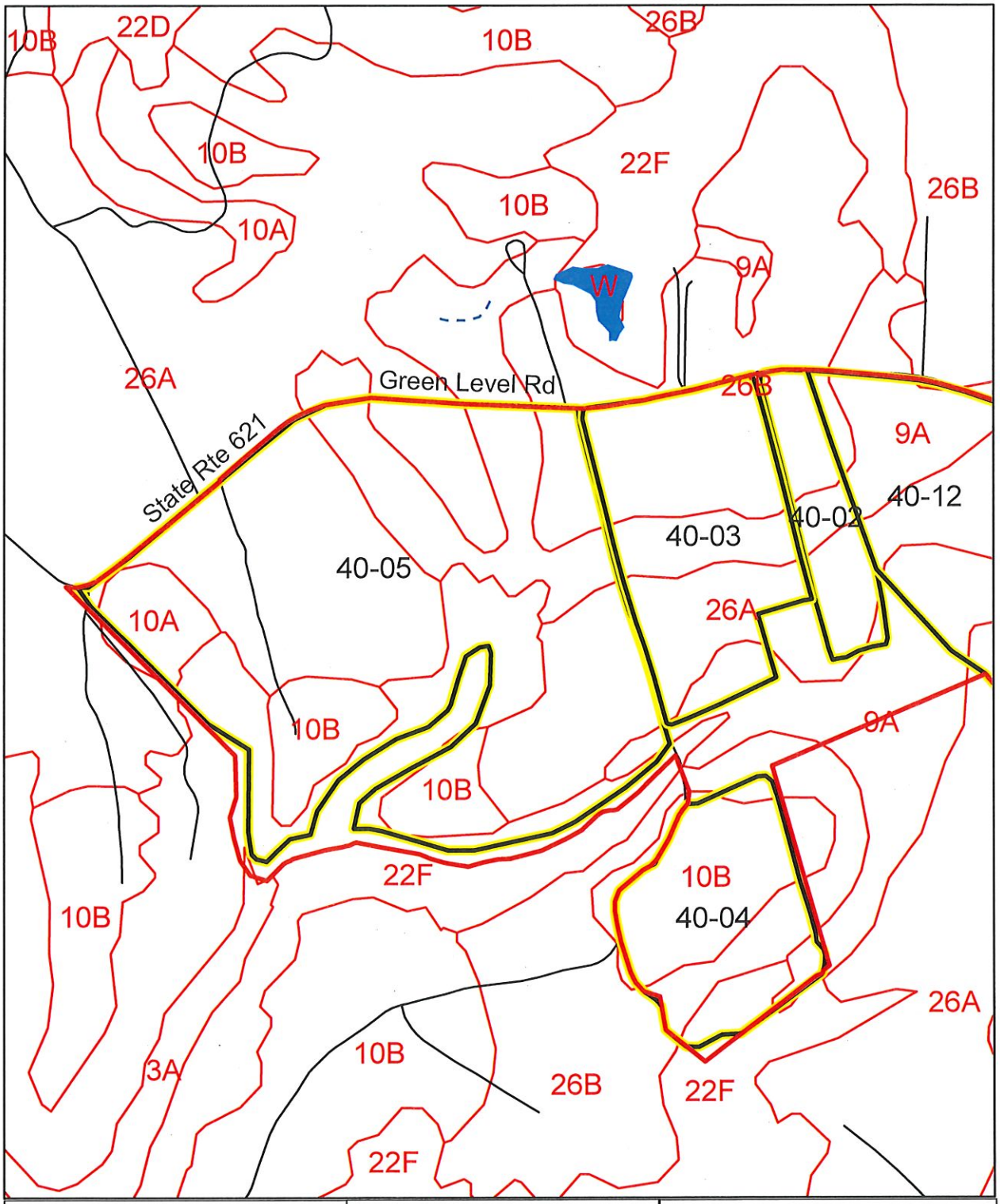
Wesley A. Walker
KW 40
Field 1



1 inch = 660 feet	SOIL MAP	1:7,920

SYNAGRO

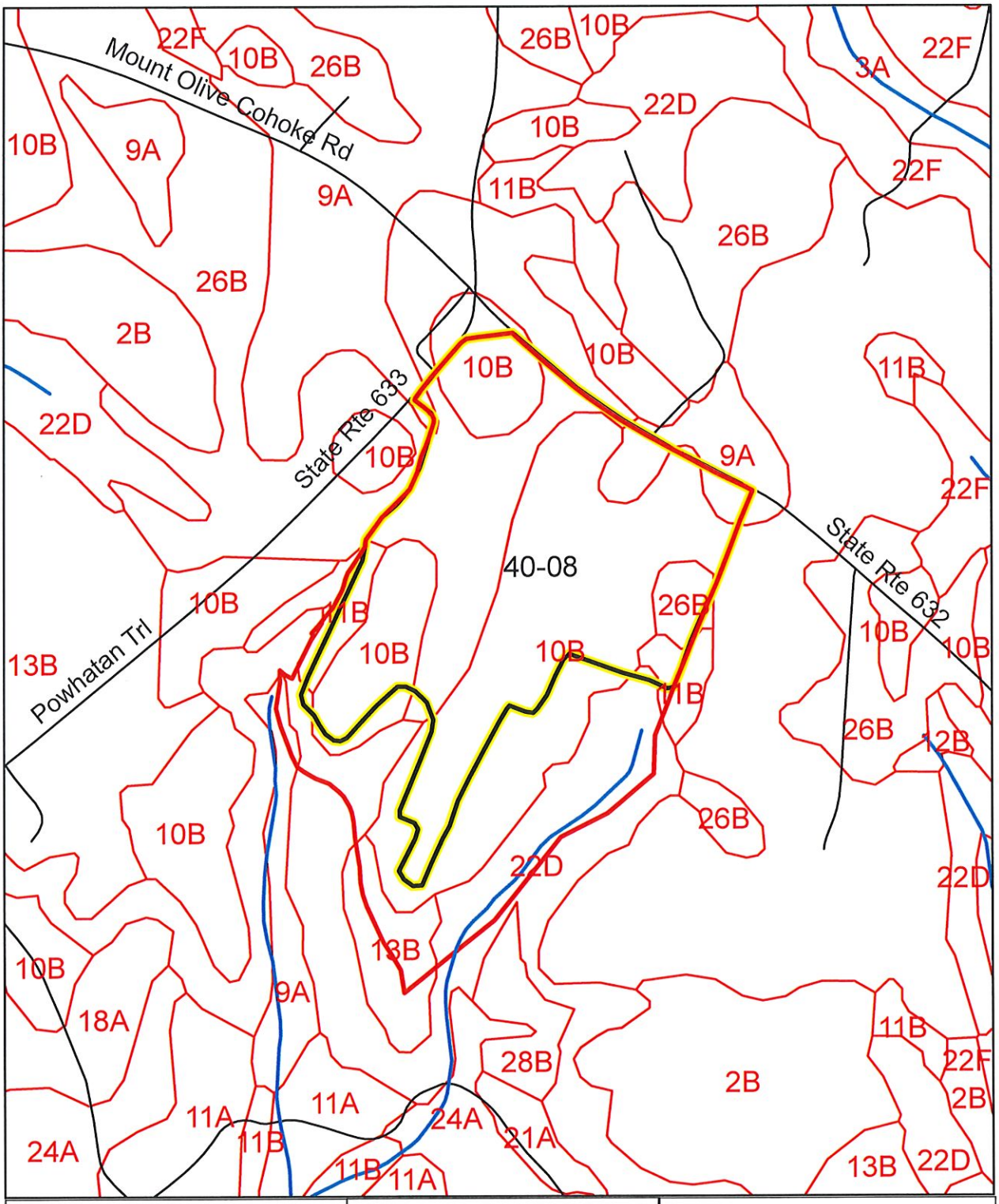
Wesley A. Walker
KW 40
Fields 2-5



1 inch = 660 feet	SOIL MAP	1:7,920

SYNAGRO

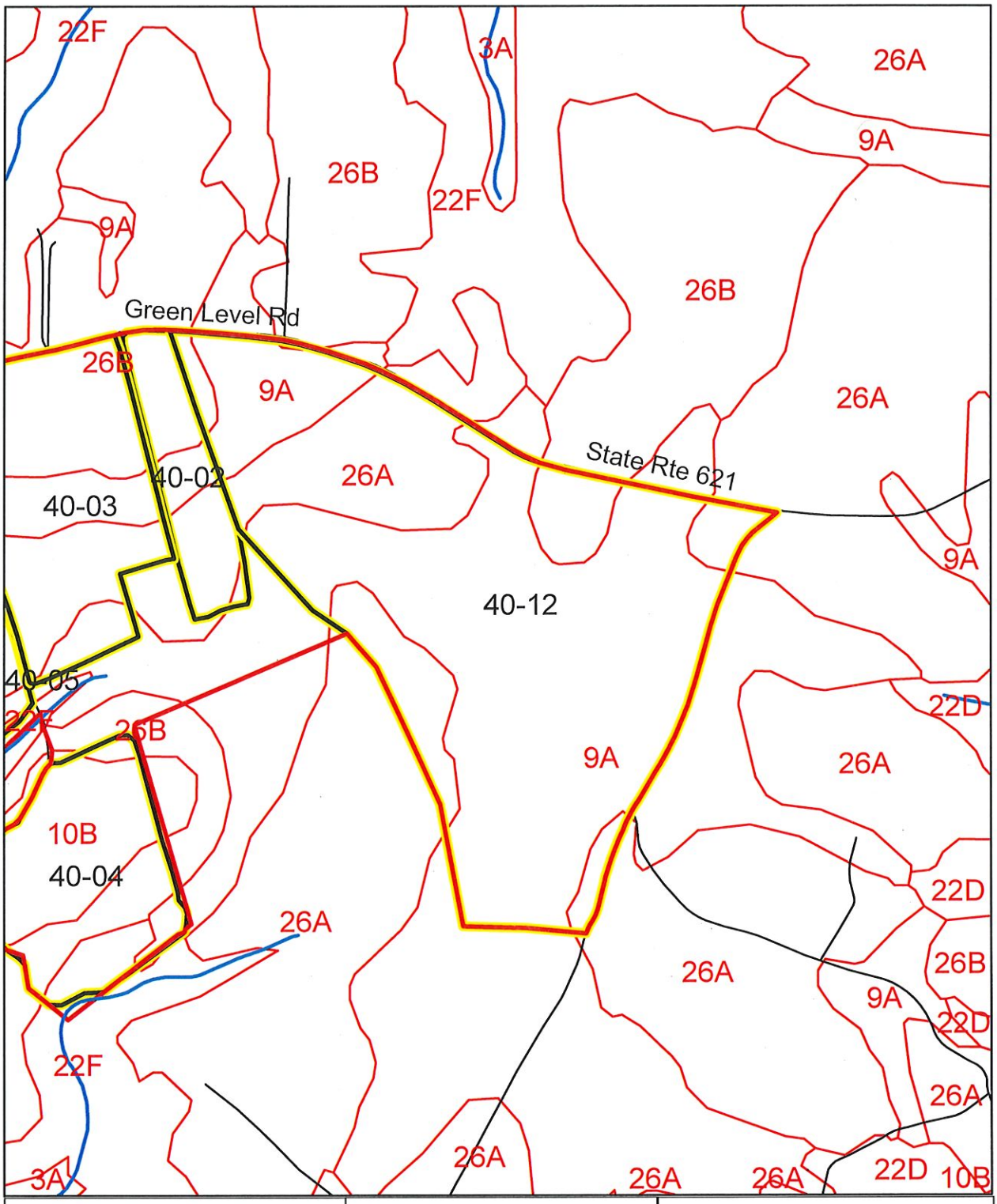
Wesley A. Walker
KW 40
Field 8



1 inch = 660 feet	SOIL MAP	1:7,920

SYNAGRO

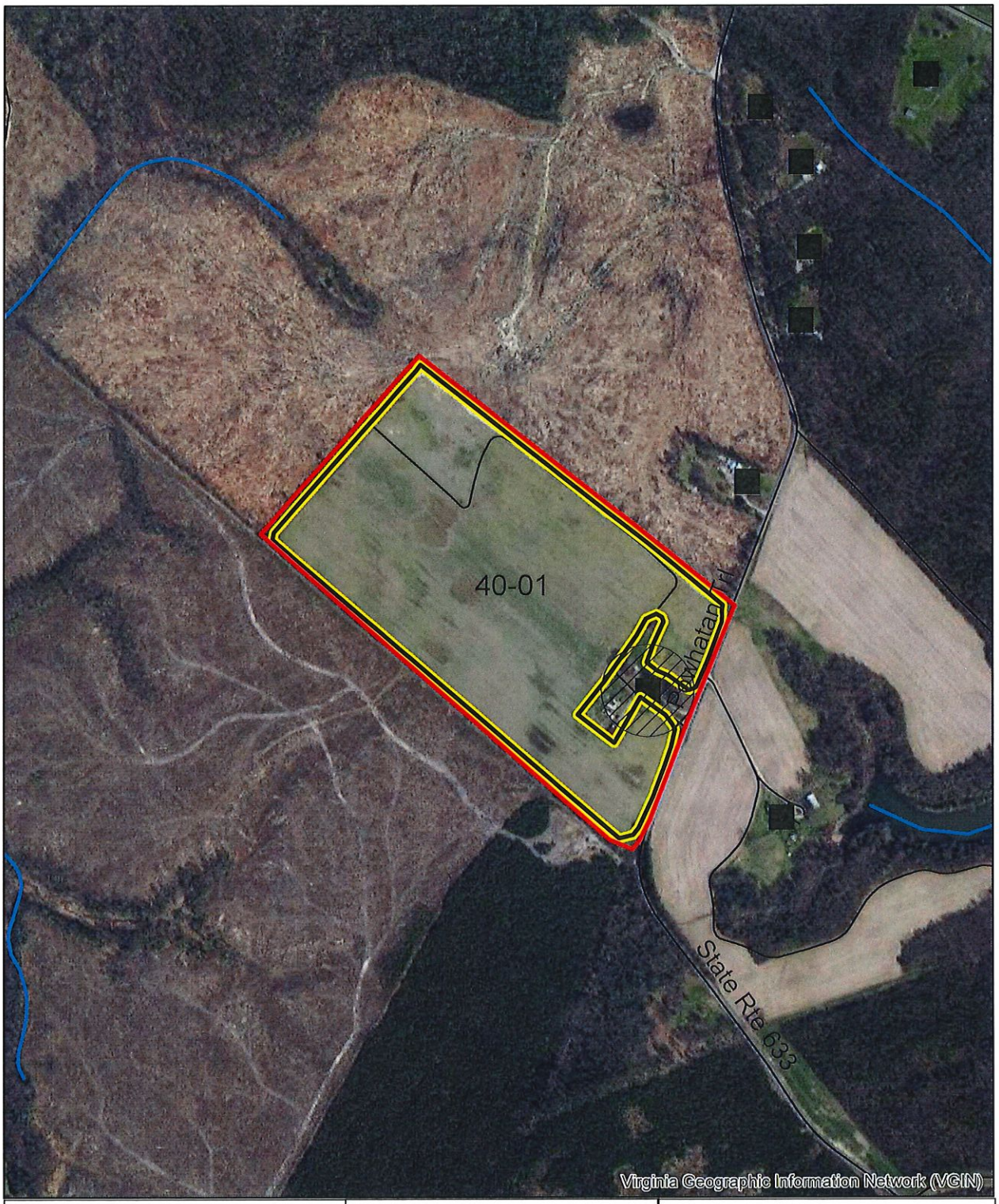
Wesley A. Walker
KW 40
Field 12



1 inch = 660 feet	SOIL MAP	1:7,920

SYNAGRO

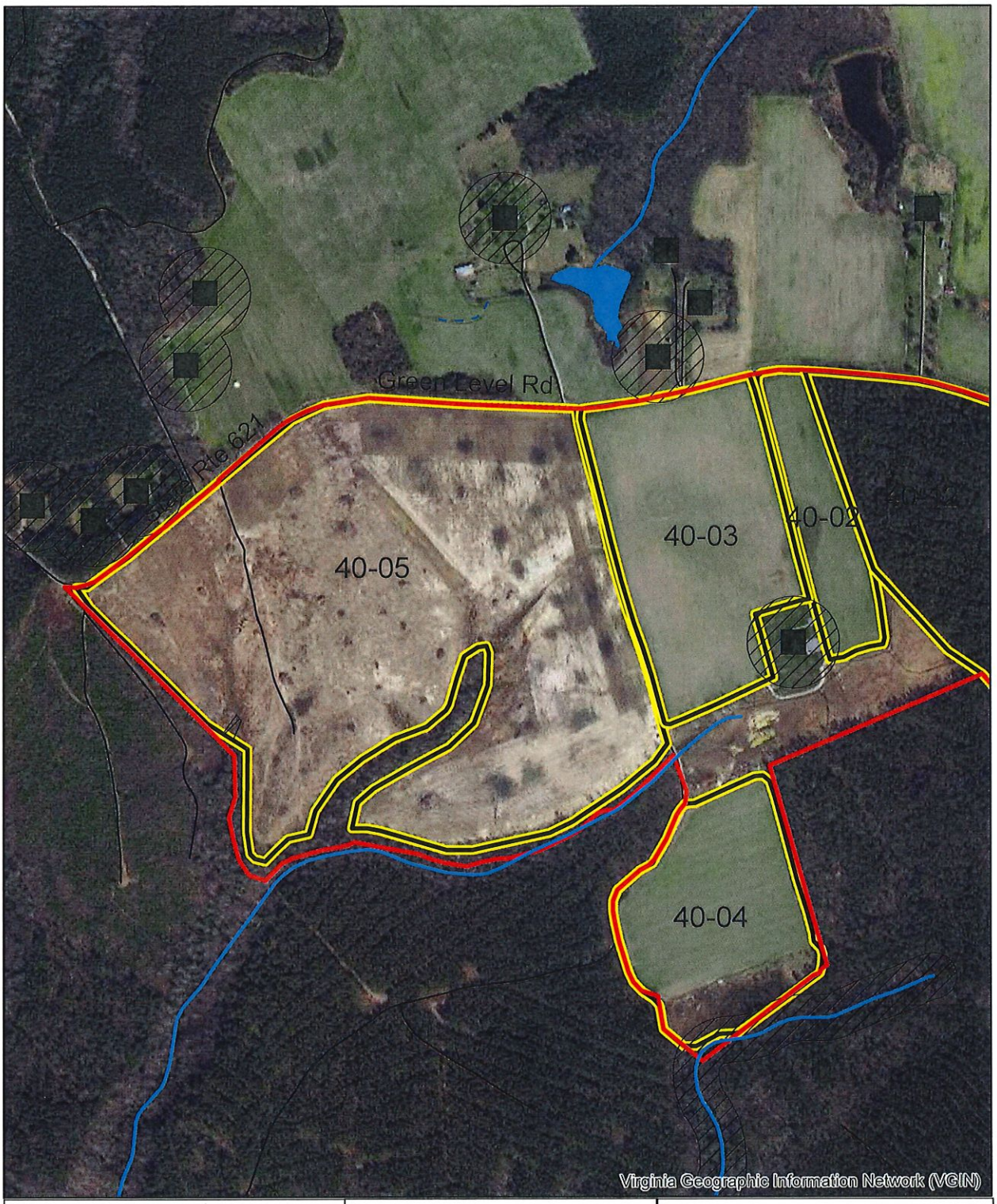
Wesley A. Walker
KW 40
Field 1



1 inch = 660 feet	AERIAL MAP	1:7,920

SYNAGRO

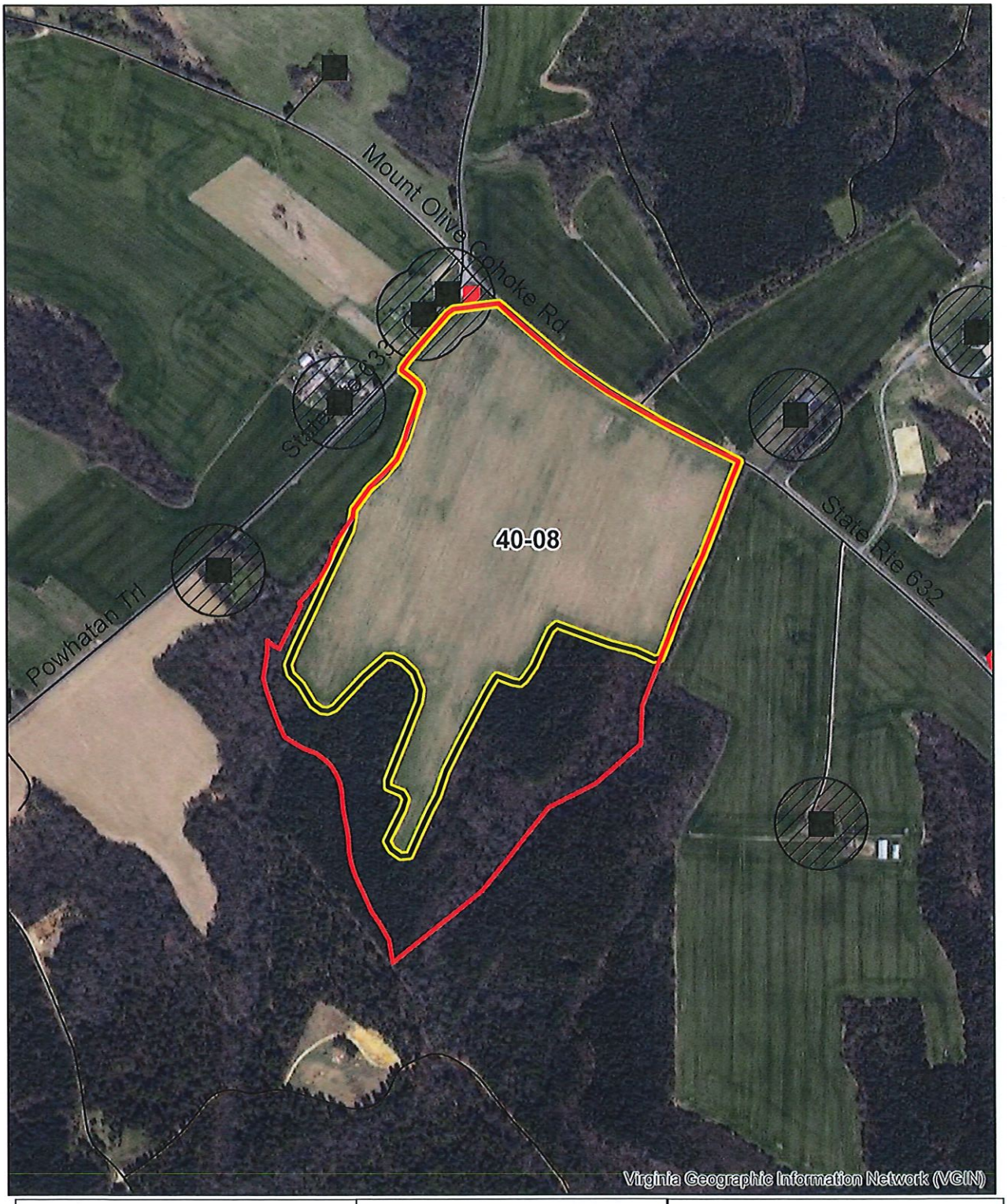
Wesley A. Walker
KW 40
Fields 2-5



1 inch = 660 feet	AERIAL MAP	1:7,920

SYNAGRO

Wesley A. Walker
KW 40
Field 8

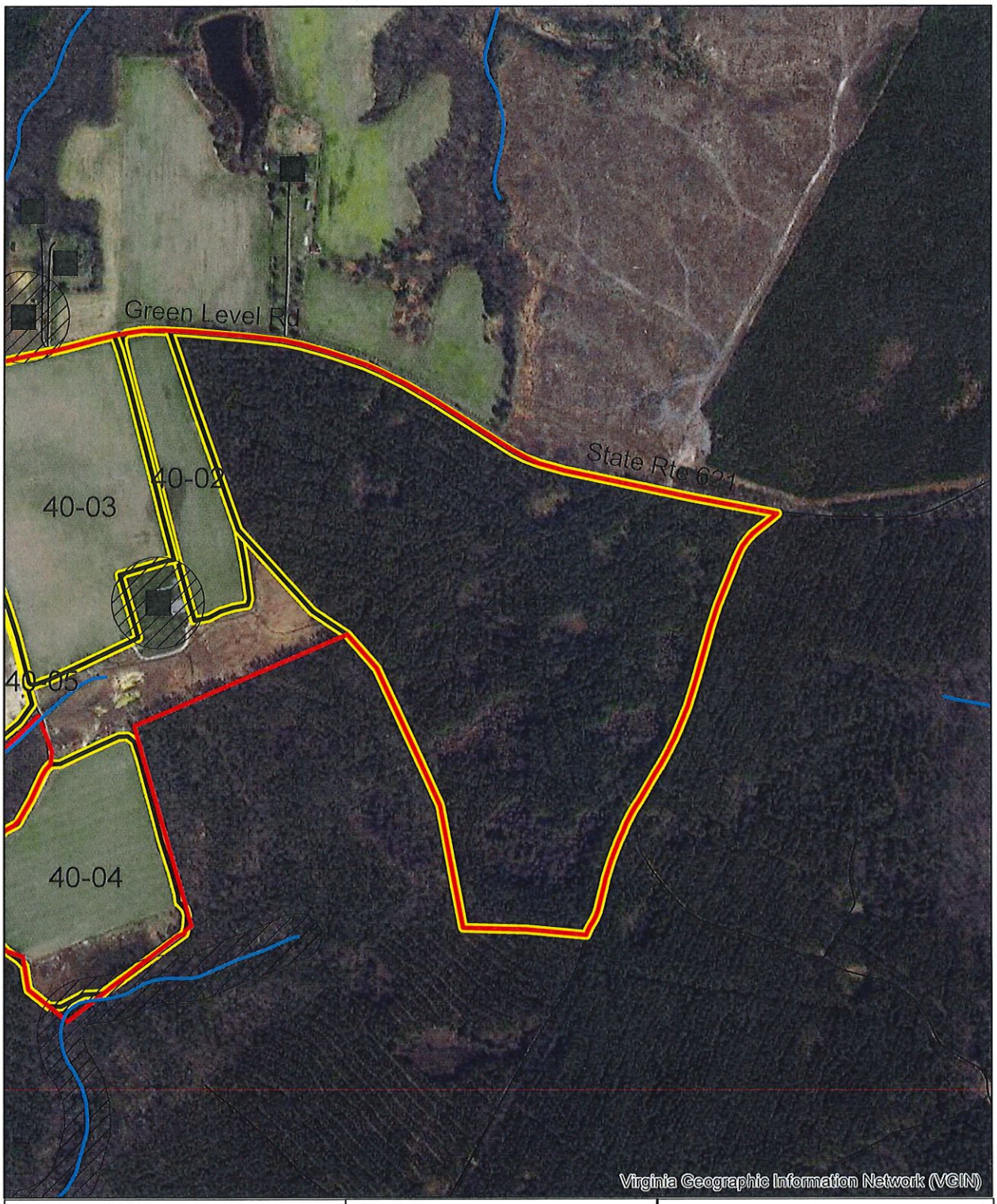


1 inch = 660 feet	AERIAL MAP	1:7,920

Revised 8/25/2021

SYNAGRO

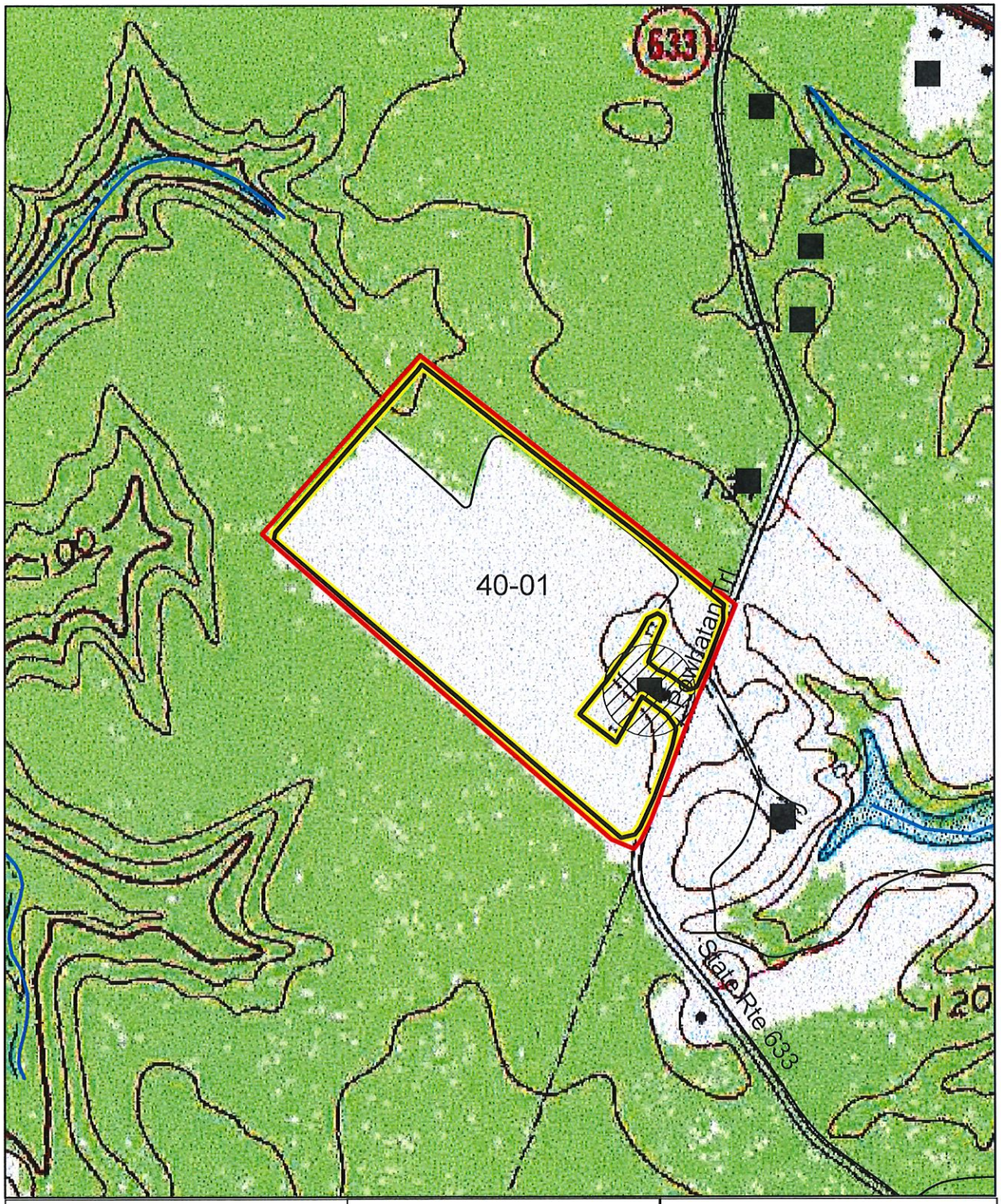
Wesley A. Walker
KW 40
Field 12



1 inch = 660 feet	AERIAL MAP	1:7,920

SYNAGRO

Wesley A. Walker
KW 40
Field 1

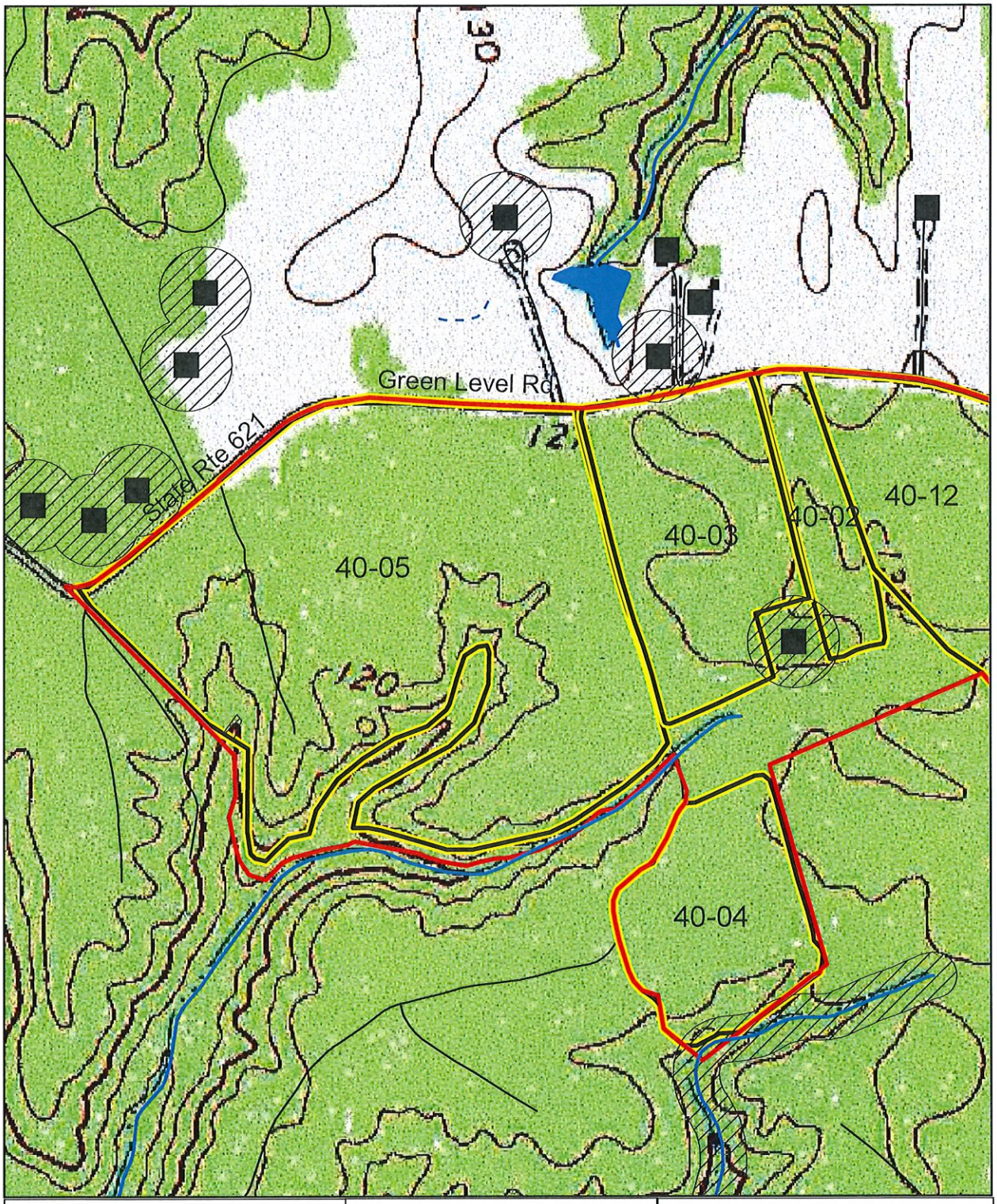


1 inch = 660 feet	TOPO MAP	1:7,920

FIELD	ACRES
40-01	42.0

SYNAGRO

Wesley A. Walker
KW 40
Fields 2-5

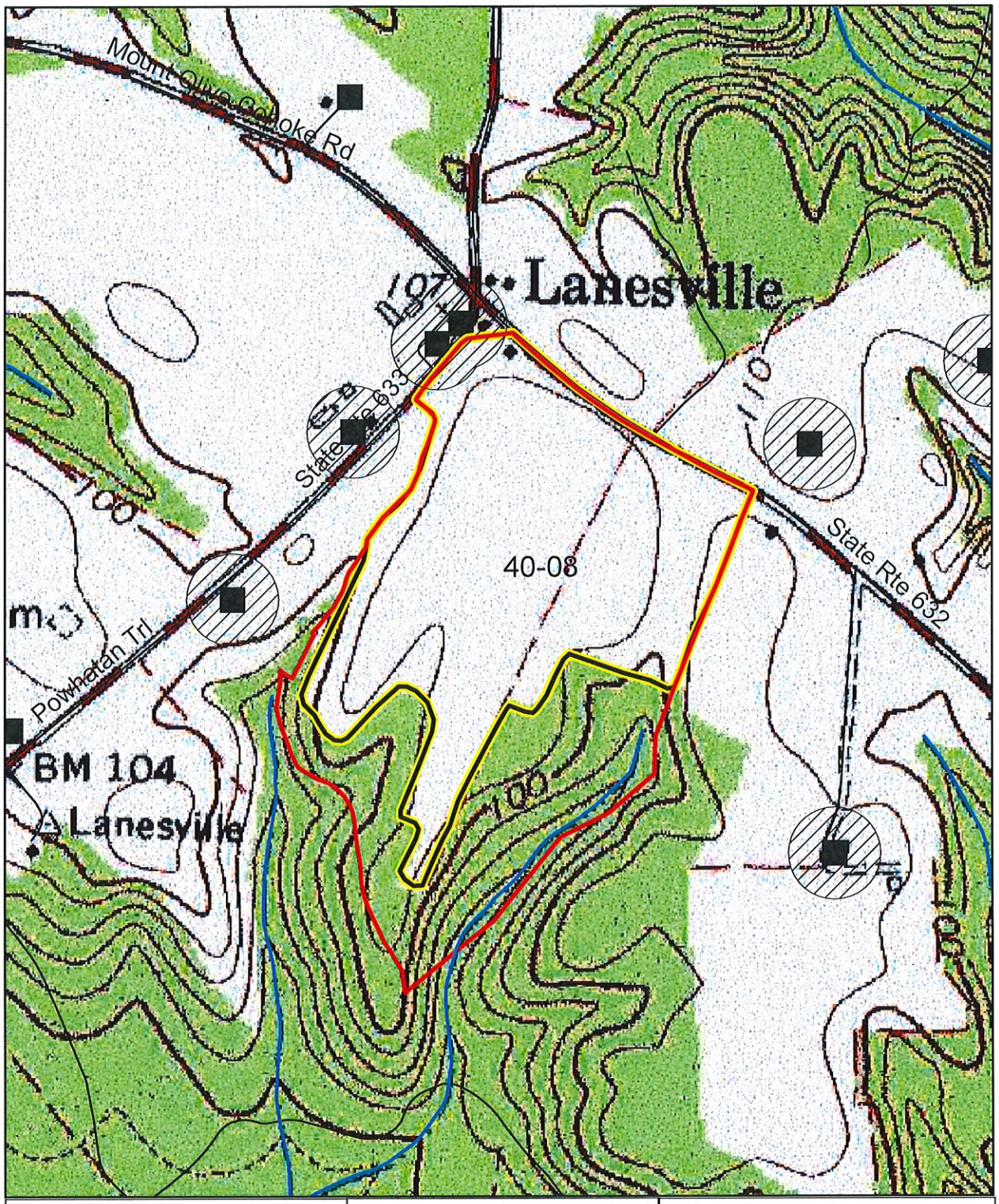


1 inch = 660 feet	TOPO MAP	1:7,920

FIELD	ACRES
40-02	7.3
40-03	21.4
40-04	15.8
40-05	76.8

SYNAGRO

Wesley A. Walker
KW 40
Field 8

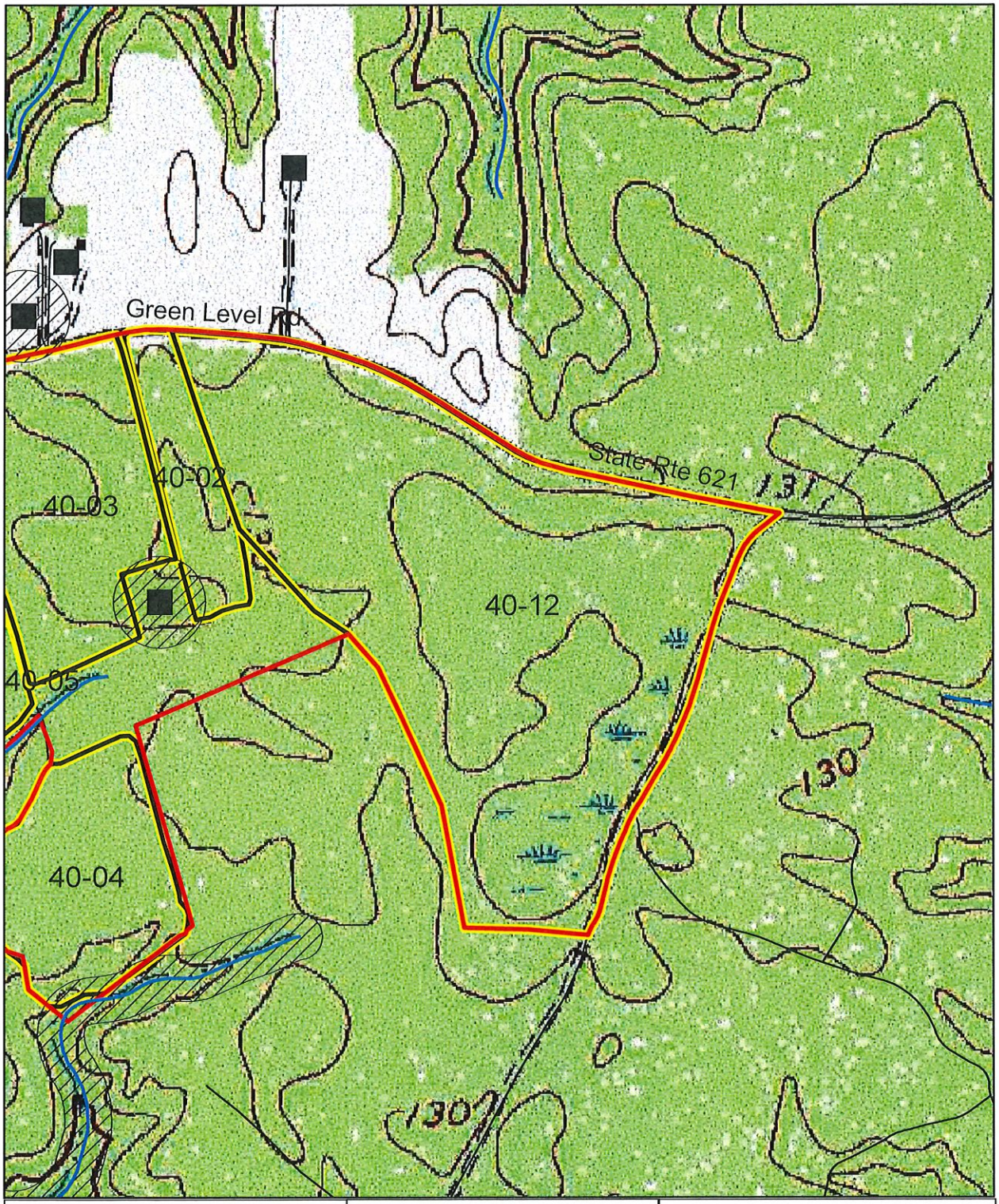


1 inch = 660 feet	TOPO MAP	1:7,920

FIELD	ACRES
40-08	48.9

SYNAGRO

Wesley A. Walker
KW 40
Field 12

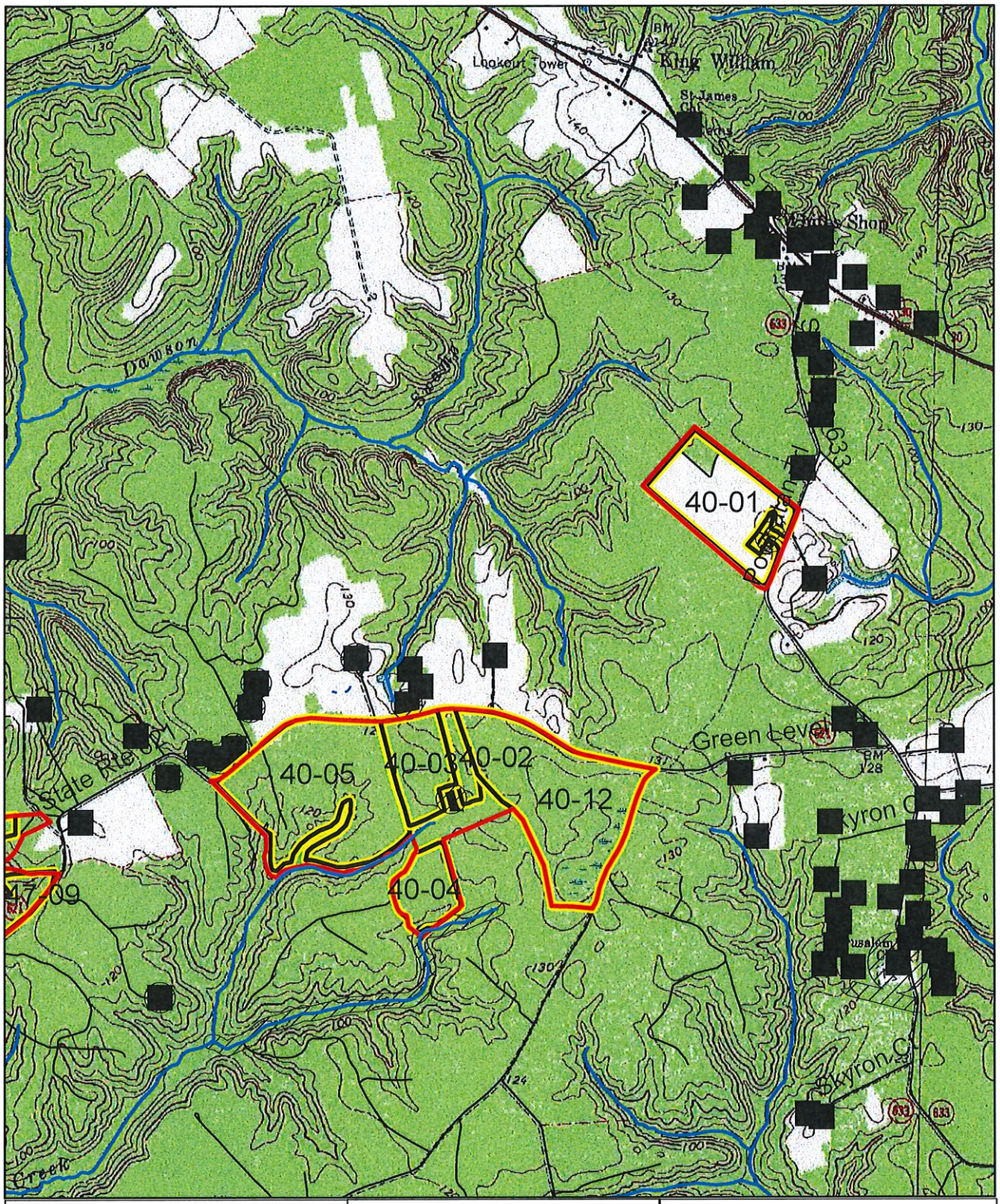


1 inch = 660 feet	TOPO MAP	1:7,920

FIELD	ACRES
40-12	74.8

SYNAGRO

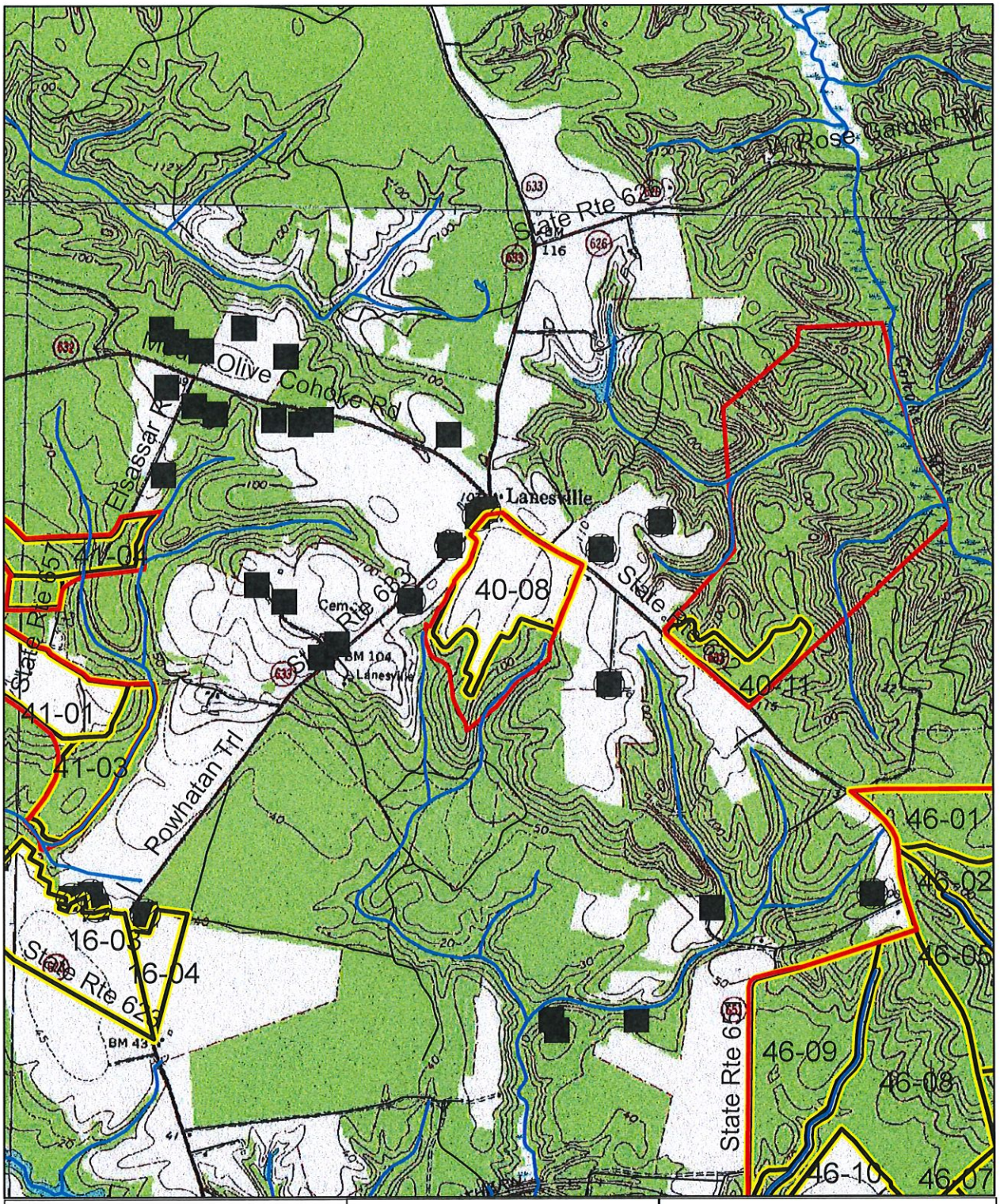
Wesley A. Walker
KW 40
Fields 1-5,12



1 inch = 2,000 feet	TOPO MAP	1:24,000

SYNAGRO

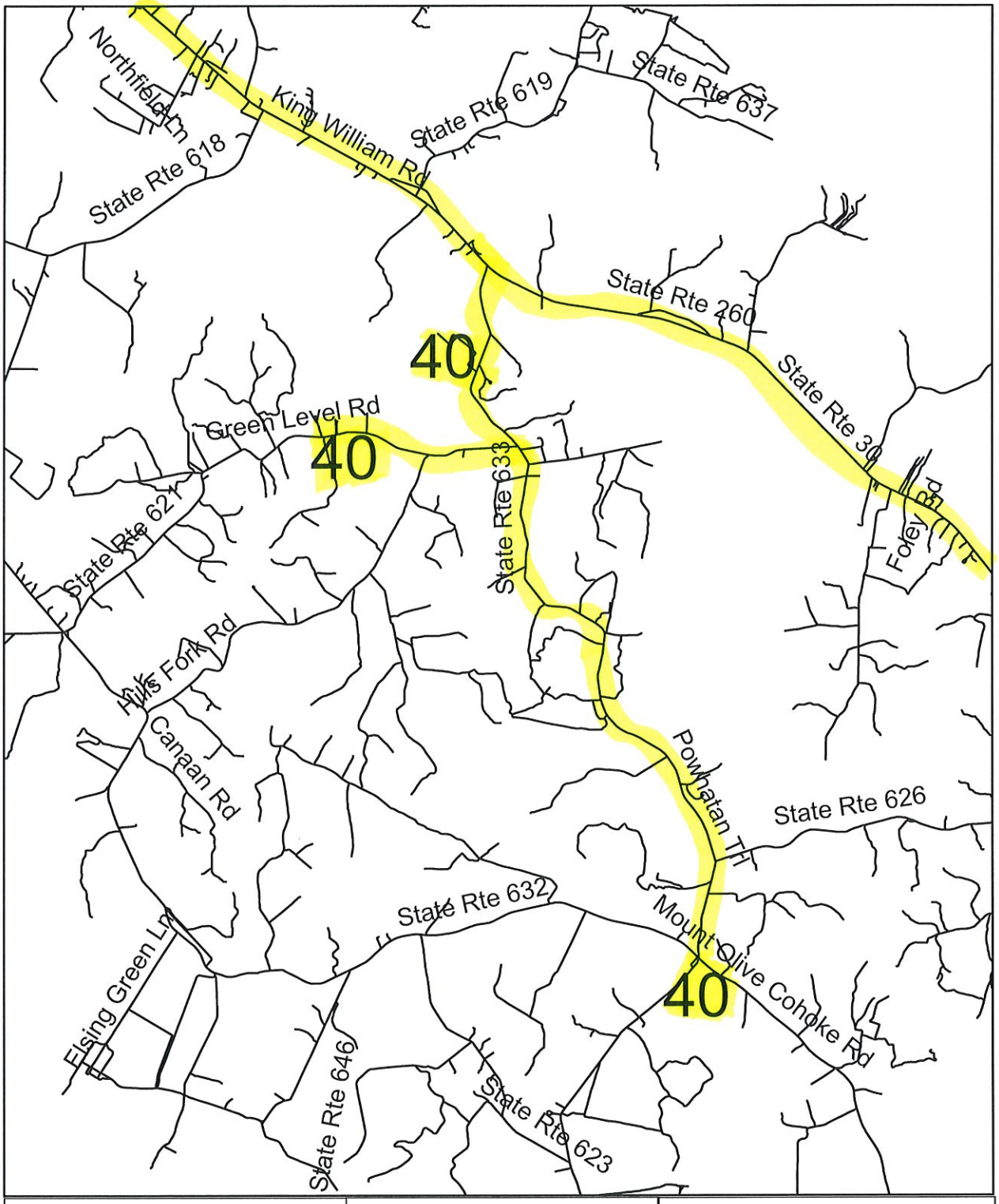
Wesley A. Walker
KW 40
Field 8



1 inch = 2,000 feet	TOPO MAP	1:24,000

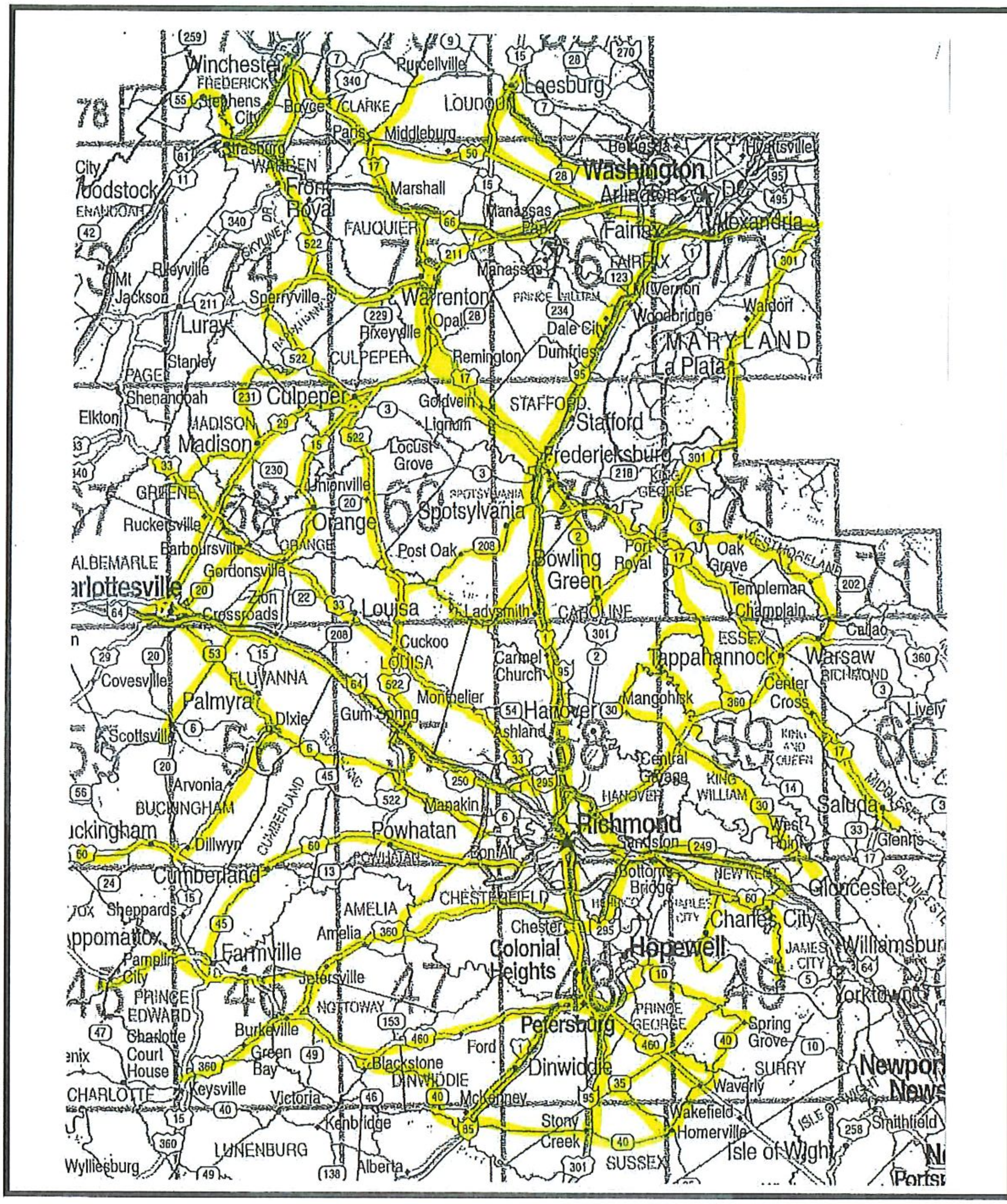
SYNAGRO

Wesley A. Walker
KW 40
Fields 1-5,8,12



1 inch = 5,250 feet	LOCATION MAP	1:63,000

SYNAGRO



N

HAUL ROUTE MAP

This map highlights all major routes from the approved generators to the locations of our permitted land. The highlighted routes on our Location Map will pinpoint routes closer to the site.